



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,759	04/10/2007	Masanori Takano	SCEP 22.700 (100809-00345)	4173
26304 7590 02/22/2008 KATTEN MUCHIN ROSENMAN LLP 575 MADISON AVENUE NEW YORK, NY 10022-2585				
EXAMINER				
LABAZE, EDWYN				
ART UNIT		PAPER NUMBER		
2887				
MAIL DATE		DELIVERY MODE		
02/22/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/590,759

## Applicant(s)

TAKANO ET AL.

## Examiner

EDWYN LABAZE

## Art Unit

2887

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 April 0207.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-11 and 22-27 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 12-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/08)  
Paper No(s)/Mail Date 8/25/06, 6/25/07, 1/24/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Receipt is acknowledged of IDS filed on 8/25/2006, 6/25/2007, and 1/24/2008.
2. Claims 1-27 are presented for examination.

***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-2 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Nojiri (U.S. 7,032,823).

Re claim 1: Nojiri discloses two-dimensional code, methods and apparatus for generating, displaying and reading the same, which includes a code data field including a two-dimensional array of a plurality of rectangular cells 4 to form code data (col.7, lines 33-40); and a plurality of corner 2a-2c cells provided to surround the code data field, wherein at least one of the corner cells occupies a larger area than at least one of the rectangular cells (col.8, lines 10-22; col.9, lines 13-67).

Re claim 2: Nojiri teaches method and apparatus, wherein the corner cells are rectangular or circular (col.7, lines 34-36).

Re claim 4: Nojiri discloses method and apparatus, which means of displaying a two-dimensional code on a display, wherein the image data comprises data for displaying a plurality of rectangular cells {herein 2a-2d} at predetermined coordinate positions on the display (col.7, lines 34-40); and data for displaying {herein display 25} a plurality of corner cells at coordinate positions surrounding the plurality of rectangular cells which are displayed at the predetermined coordinate positions, wherein the data for the corner cells and the rectangular cells is configured such that at least one of the corner cells appears larger {see figs.# 2A-2C, 3, 8} than at least one of the rectangular cells when displayed (col.20, lines 45-64; col.28, lines 1-62).

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Slade (U.S. 6,631,905).

Re claims 19-21: Slade discloses game apparatus and method for teaching basketball skills, which includes a game card 12 (see figs.# 1-2) is placed and which is provided with a gradation area in which brightness varies gradually, wherein a plurality of gradation areas are provided on the game mat 20 (see fig.# 2), and the gradation areas have the same hue, wherein the outer edge of the gradation area is circular 19 and brightness levels vary gradually and concentrically from high to low from the center of the gradation area toward the outer edge thereof (col.5, lines 61-67; col.6, lines 13-25).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 5-9, and 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nojiri (U.S. 7,032,823) in view of Hara et al. (U.S. 5,726,435).

The teachings of Nojiri have been discussed above. Nojiri further teaches that each of the cells 4 and data area 3 are assigned a color {such as white, red, green, and blue} (see col.7, lines 57-67), wherein the position detecting pattern/corner 2a has a larger area than position 2b (col.8, lines 10-22; col.8, lines 47-50; col.9, lines 13-67).

Nojiri fails to specifically teach that the corner cells are round in shape and a plurality of polygonal cells.

Hara et al. discloses optically readable two-dimensional code and method and apparatus using the same, which includes corner cells that are round/circular (see figs.# 11A, 11B; col.5, lines 35-46; col.14, lines 18-31).

In view of Hara et al.'s teachings, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ into the teachings of Nojiri circular/round corner cell so as to assist in determining the orientation of the visual code. Furthermore, it would be desirable to use a circular visual code that generally matches that round shape of the object and to facilitate decoding the pattern used in the code in order to identify the object.

***Allowable Subject Matter***

8. Claims 9-11 and 22-27 are allowed.
9. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record, taken alone or in combination with any other references, fails to specifically teach a binarization processor sets up a range of pixel values in the RGB format for detecting the reference cell and binarizes the frame image by extracting pixels within the range thus set up, whereupon the first detector detects the reference cell by referring to the resultant binary data, wherein the binarization processor sets up a range of pixel values in the RGB format for detecting the corner cells and binarizes the frame data by extracting pixels within the range thus set up, whereupon the second detector detects the corner cells by referring to the resultant binary data. These limitations in conjunction with any other limitations in the claimed invention were not shown by the prior art of record.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nishino (U.S. 6,116,510) teaches code reading and recording apparatus.

Sato (U.S. 6,681,055) teaches formation method of two-dimensional code.

Shideler et al. (US 2005/0189715) teaches gaming equipment and methods.

Oishima et al. (U.S. 6,267,296) teaches two-dimensional code and method of reading.

Grady (US 2004/0002387) teaches card reader and scanner device and methods of using same.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDWYN LABAZE whose telephone number is (571)272-2395. The examiner can normally be reached on 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Paik can be reached on (571) 272-2404. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/EDWYN LABAZE/  
Examiner, Art Unit 2887  
February 27, 2008